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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/661,834	06/11/96	KRONZER J	45751USA6C

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EXAMINER	
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ART UNIT	**PAPER NUMBER**
3761	31

DATE MAILED: 05/23/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/661,834	JOSEPH P. KRONZER ET AL.
Examiner	**Group Art Unit**
AARON J. LEWIS	3761

☒ Responsive to communication(s) filed on *Mar 6, 2000*.

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *THREE* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *25-37* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *25-37* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 25-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, each of claims 25 and 32 recites the broad recitation "...at least 40 weight percent thermally bonding fibers...", "...at least 10 weight percent of the fibers in the nonwoven layer being bicomponent fibers,...", "...a surface fuzz value of not less than 7.5...", and each of the claims also recites "...with the provisio that if the bicomponent fiber

content is 85 weight percent or greater, then the surface fuzz value exceeds 8.0." which is the narrower statement of the range/limitation.

2. Claims 25-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 25, lines 5 and 6 recite "...and optionally (ii) staple fibers,...". It is not clear whether appllicant intends to claim the combination of a fibrous filtration face mask and staple fibers. The use of the language "...and optionally..." renders the scope of the claim unclear with respect to whether applicant intends to claim the combination or not. The conjunction "...and..." is seen as a means for reciting the combination whereas the word "...optionally..." is seen as a means for reciting elements alternatively (i.e. consistent with the use of the word "...or...").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 25-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyrud et al.('619).

As to claim 25, Dyrud et al.('619) disclose a fibrous face mask (figs.1-3) for filtering comtaminants and/or particulate matter, which comprises: a means (12) for securing the mask to the face of a wearer; and a non-woven fibrous layer (disclosed as a shaping layer) attached (col.3, lines 13-15) to the securing means and containing at least about 40% weight thermally bonding fibers based on the weight of the in the non-woven fibrous layer, at least about 10% weight of the fibers in the non-woven layer being bicomponent fibers, and optionally staple fibers, the non-woven fibrous layer being molded in a cup-shaped configuration. As for the claimed weight ratios of at least 40% weight thermally bonding fibers and at least 10% weight bicomponent fibers in the non-wovwn layer, applicant is referred to Dyrud et al. (col.4, lines 29-37) which discloses weight ratios ranging from 0% staple fibers:100% bicomponent fibers to 75% staple fibers:25% bicomponent fibers, a range which includes the claimed values of 40% thermally bonding fibers and 10% bicomponent fibers.

As for the claimed "surface fuzz value" of not less than 7.5, since Dyrud et al. disclose thermally bonding fibers having bicomponent fibers as well as staple fibers (col.4, lines 29-37)in a plurality weight percent ratios which includes 40 wt.% thermally bonding fibers and at least about 10 wt.% bicomponent fibers, it is submitted that the process of molding which includes the use of heat as disclosed by Dyrud et al. would have resulted in a shaping layer having a surface fuzz value inlcluding one which is not less than 7.5.

As to claim 26, Dyrud et al. as discussed above disclose a wide range of weight percent of fibers making up the non-woven layers which include the claimed weight per cent of fibers.

Moreover, Dyrud et al. disclose a plurality of non-woven layers having filtration layer of blown microfibers therebetween (fig.2 and col.6, line 63-col.7, line 20).

As to claims 27-31, and new claims 33-37, the particular values of weight per cent of the bicomponent fibers in Dyrud et al. can be arrived at through mere routine experimentation and observation with no criticality seen in the particular values being claimed. The surface fuzz values resulting from the heated molding process disclosed by Dyrud et al. and a given proportion of specific fibers would result in a shaping layer having a plurality of surface fuzz values in dependence upon the particular selection of fibers.

Claim 32 with the exception of the optional inclusion of staple fibers is substantially equivalent in scope to claim 25 and is included in Dyrud et al. for the reasons set forth above with respect to claim 25.

Response to Arguments

5. Applicant's arguments filed 03/06/00 have been fully considered but they are not persuasive.

Applicant's arguments regarding the rejection of claims 25-37 due to broad range/limitation with a narrow range/limitation in the same claim are disagreed with because as written the scope of the claims is indefinite with respect to the particular weight percent of bicomponent fibers and indefinite with respect to the particular surface fuzz value that applicant intends to claim. That is, it is not clear whether applicant intends the claims to be drawn to 'at least 40 weight percent bicomponent fibers' or '85 weight percent or greater' nor is it clear whether applicant intends the

claims to be drawn to a surface fuzz value of 'not less than 7.5' or a surface fuzz value which 'exceeds 8.0'.

Applicant's arguments regarding the rejection of claims 25-31 due to the use of the phrase "...and optionally..." are disagreed with because while the MPEP 2173.05(h) does indicate that the use of the term "...and optionally..." may be used where there is no ambiguity as to which alternatives are covered by the claim. However, (MPEP 2173.05(h)) goes on to specify that in a case in which the list of alternatives can vary, abiguity may arise. In the instant application, claim 25, the list of alternatives including thermally bonding fibers, bicomponent fibers and staple fibers may vary in such a manner (i.e. by weight percent) that the constituency of the non-woven fibrous layer intended by applicant cannot be determined from the claim language.

Applicant's arguments regarding the prior art to Dyrud et al. are disagreed with because there is nothing in the disclosure of Dyrud et al. that suggests anything less than an enabling disclosure and because while Dyrud et al. may disclose a molding method which is accomplished by a so called 'hot molding method', the claims of the instant application do not define a molding method including a so callled 'cold molding method' in any manner which is unobvious over that of Dyrud et al..

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron J. Lewis whose telephone number is (703) 308-0716.

Aaron J. Lewis

May 21, 2000

Aaron J. Lewis
Primary Examiner